

DRILL HOLES

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BORDER REV: DATE: JUNE 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting and interconnect at the intersection of MD 704 (Martin L King Hwy) and Carrington Avenue in Prince George's County. Countdown pedestrian signals with audible pushbuttons shall be installed across the east leg of the intersection. MD 704 (Martin L King Hwy) is assumed to run an north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA six-phase, semi-actuated mode, with the MD 704 (Martin L King Hwy) approaches running concurrently. The Exclusive/Permissive left turn phases shall remain in operation for both approaches of MD 704 (Martin L King Hwy). The Countdown pedestrian phase with audible pushbutton actuation across the south leg of MD 704 (Martin L King Hwy) shall remain in operation. A new Countdown pedestrian phase with audible pushbuttons on recall shall be installed across the east leg of Carrington Avenue. The Carrington Avenue approaches shall also continue to run concurrently.
- The existing full-traffic-actuated, eight-phase controller with video interface and 2-wire Control Unit and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.
- The Contractor shall deliver the audible pushbuttons to the SHA Signal Shop for testing and programming.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7652 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contact persons for District #3 (Prince George's County) and SHA are as follows:

Ms. Felecia Murphy
Assistant District Engineer - Traffic
Phone: (301) 513-7404

Mr. Vernon Stinnett
District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Victor Grafton
Assistant District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Ed Rodenhizer
Manager, Signal Operations Section
410-787-7652

Sonny Bailey
Manager, Sign Shop Operations
410-787-7676

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9002	NEMA load switch	1 EA
9570	Sheet aluminum signs to consist of: (ground mount)	13 SF
	Pedestrian education R10-3(1) mod sign. (Note: Sign to read "PUSHBUTTON TO CROSS CARRINGTON AVENUE")	2 EA
	S1-1 "SCHOOL" sign, (36" x 36") FY/G	1 EA
	W16-7P(L) "arrow (symbolic)" diagonal sign, (24" x 12") FY/G	1 EA

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of: (mast arm)	26 SF
	M95-1 "SOUTH, Left Arrow/ MD 704 / NORTH, Right Arrow" sign, (78"x24")	1 EA
	M95-1 "NORTH, Left Arrow/ MD 704 / SOUTH, Right Arrow" sign, (78"x24")	1 EA

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1003	Maintenance of traffic per assignment.	1 EA
2002	Test Pit Excavation	2 C.Y.
5003	Removal of existing pavement line markings.	795 L.F.
5004	12" white preformed thermoplastic pavement marking.	810 L.F.
5005	24" white preformed thermoplastic pavement marking.	25 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	260 L.F.
6002	5" concrete sidewalk.	1060 S.F.
6003	Detectable warning surfaces for curb ramps.	100 S.F.
8005	Adjust existing handhole to grade including frame and collar.	1 EA
8008	Audible/tactile pedestrian pushbutton station & signs.	2 EA
8009	Breakaway pedestal pole (10').	2 EA
8016	LED 16" countdown pedestrian signal head.	2 EA
8024	Remove and dispose of existing material & equipment per assignment.	1 EA
8036	Schedule 80 rigid PVC conduit up to 4" - trenched.	55 L.F.
8038	Install overhead or ground mounted sign.	39 SF
8040	No. 6 AWG stranded bare copper ground wire.	60 L.F.
8049	Cut, clean, galvanize and cap traffic signal structure.	1 EA
8051	Electrical cable - 2 conductor (No. 14 AWG).	170 L.F.
8053	Electrical cable - 5 conductor (No. 14 AWG).	195 L.F.

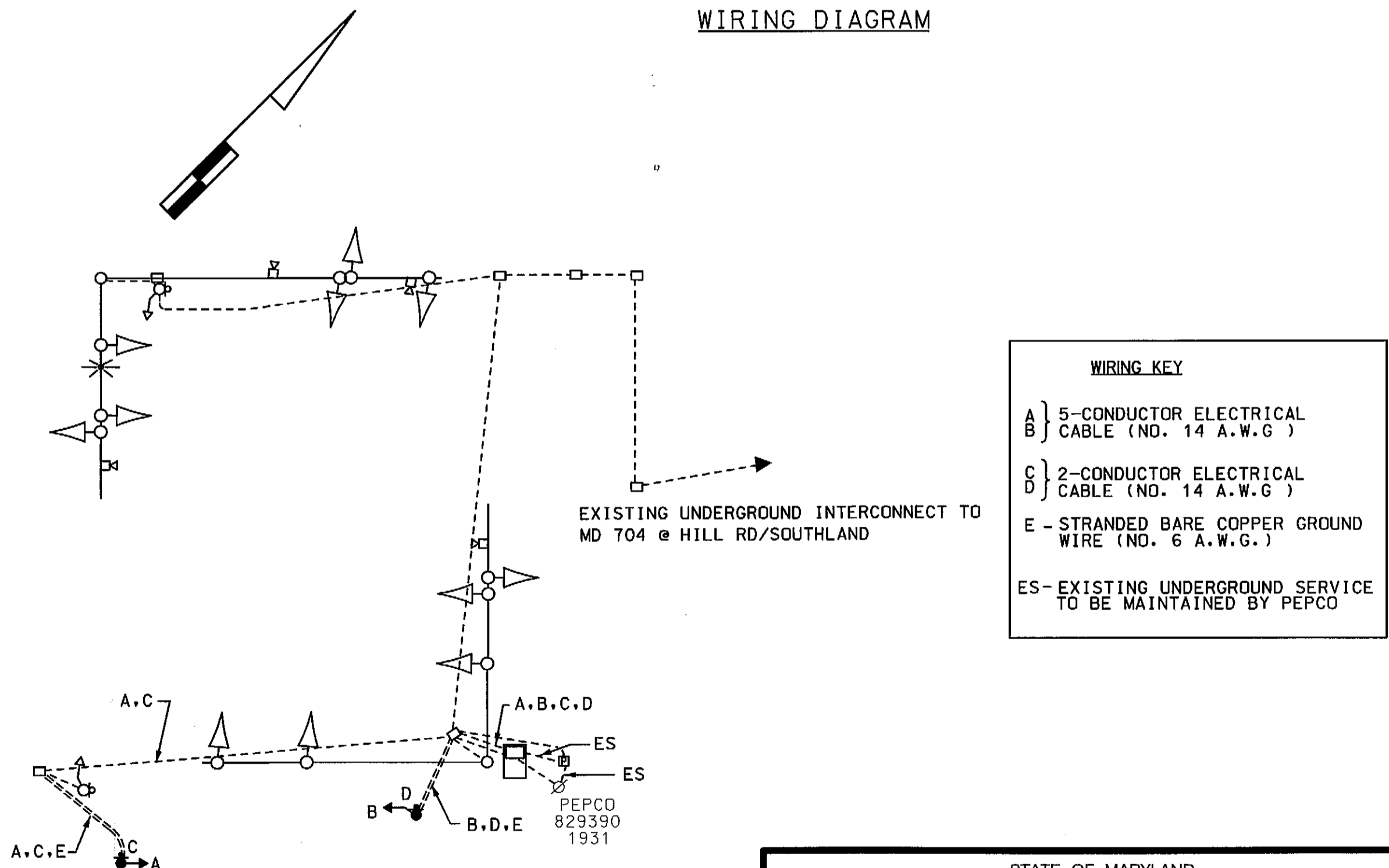
C. EQUIPMENT TO BE REMOVED

All removed signal materials are to
become property of the contractor.

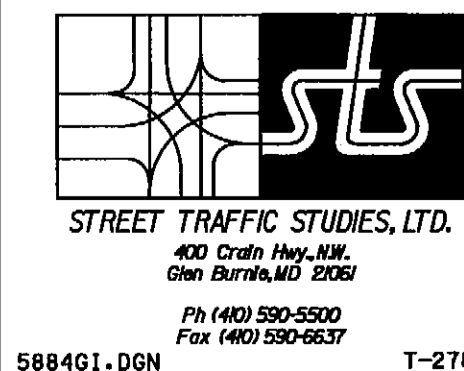
PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 & 5	←G-/R	←G-/R	R	←G-/R	←G-/R	R	R	R	R	R	R	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6															
PHASE 1 & 6	←G-/G	←G-/G	G	R	R	R	R	R	R	R	R	WK	WK	DW	DW
1 & 6 CHANGE	←Y-/G	←Y-/G	G	R	R	R	R	R	R	R	R	WK	WK	DW	DW
PHASE 2 & 5	R	R	R	←G-/G	←G-/G	G	R	R	R	R	R	DW	DW	DW	DW
2 & 5 CHANGE	R	R	R	←Y-/G	←Y-/G	G	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR / COUNTDOWN	G	G	G	G	G	G	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	R	R	G	G	G	G	G	DW	DW	WK	WK
PED CLEAR / COUNTDOWN	R	R	R	R	R	R	G	G	G	G	G	DW	DW	FL/DW	FL/DW
4 & 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



TOD NO: XX354-24
SHA NO: PG901A57/K57
MD 704 @ Carrington Avenue
MD 704 @ Hill Rd/Southland Drive



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 704 (MARTIN LUTHER KING
HWY) AND CARRINGTON AVENUE
TRAFFIC SIGNAL PLAN

GENERAL INFORMATION SHEET

SCALE NONE DATE 11/12/10 CONTRACT NO. XX3545168R

DESIGNED BY J.W.A. COUNTY PRINCE GEORGE'S
DRAWN BY R.C. LOGMILE 16070401.09
CHECKED BY J. Key 12/10 TMS NO. 1602
F.A.P. NO. TOD NO.

TS NO. 4540B DRAWING NO. 3 OF 3 SHEET NO. OF

PLOTTED: \$DATE\$TIME\$
FILE: \$FILE\$